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Effect of time and storage methods on the detection of *Candidatus Liberibacter asiaticus* in *Diaphorina citri* by qPCR*

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The assessment of bacterialiferous Asian citrus psyllid (ACP) frequency is important for (i) studies of bacteria acquisition and inoculation by ACP, (ii) disease detection in disease free areas but with ACP presence, (iii) efficiency evaluation of inoculum reduction strategies, (iv) evaluation of frequency of *Candidatus Liberibacter asiaticus* (Las)-positive ACP and the abundance of inoculum sources or putative new HLB infections relationships. Depending on the conditions and time of storage of collected psyllids, Las DNA in ACP could degrade and Las-false negative results might occur. Thus, this study was conducted to evaluate the detection of Las in ACP adults submitted to different storage methods and time of storage by real-time PCR (qPCR). Two 2x3x7 factorial experiments were conducted. Factors were 'Ethanol' (with or without 70% ethanol), 'Temperature' (-20°C, 4°C and 26°C) and 'Time' (0, 3, 7, 14, 21, 28 and 35 days). For each treatment, 20 samples with 3 ACP adults from nymphs reared on Las infected trees were tested for Las presence by qPCR. No significant differences in percentages of psyllids samples positive for Las were observed among the storage methods up to 35 days, except a slight trend of decline in Las detection in samples storage without ethanol at 26°C after 14 days of storage.

*Part of first author's dissertation in the Fundecitrus Professional Master on Control of Citrus Diseases and Pests.